

RF exposure information

Product description

Applicant	:	Murata Manufacturing Co., Ltd.
Applicant address	:	1-10-1 Higashikotari, Nagaokakyo-shi, Kyoto 617-8555 Japan
FCC ID	:	VPYLB1YA
ISED ID	:	772C-LB1YA
Product description	:	Communication Module
Operating frequency range	:	2412 - 2462 MHz
Maximum average output power	:	14.49 dBm
Maximum antenna gain	:	+1.3 dBi @2400MHz, +1.4 dBi @2442MHz, +1.6 dBi @2484MHz

Analysis for mobile use

The maximum average output power is 14.49 dBm.

The best case gain of the antenna is +1.6 dBi.

E.I.R.P. = (14.49 dBm) + (1.6 dBi) = 16.09 dBm.

16.09 dBm logarithmic terms convert to numeric result is nearby 40.64 mW.

$$S = \frac{\text{E.I.R.P.}}{4\pi R^2} = \frac{40.64 \text{ mW}}{4\pi(20 \text{ cm})^2} = 0.00809 \text{ mW/cm}^2$$

For FCC

E.I.R.P. (mW)	Evaluation distance R (cm)	Power density S (mW/cm ²)	MPE limit (mW/cm ²)	Result
40.64	20	0.00809	1	Complied

For ISED

E.I.R.P. (W)	Evaluation distance R (cm)	Exemption limit (W)	Result
0.04064	20	1.31 x 10 ⁻² f ^{0.6834} 2.68 (@2412MHz)	Complied